#3/FR

PAGE:

## RAW SEQUENCE LISTING

PATENT APPLICATION US/09/288,326

DATE: 04/20/1999 TIME: 11:07:44

Input Set: I288326.RAW

This Raw Listing contains the General Information Section and up to first 5 pages.

```
ENTERED
    <110> APPLICANT: Kei Roger Aoki
          George Sachs
2
     <120> TITLE OF INVENTION: Method and Compositions for the
 3
          Treatment of Pancreatitis
 5
     <130> FILE REFERENCE: 17282
    <140> CURRENT APPLICATION NUMBER: US/09/288,326
 6
     <141> CURRENT FILING DATE: 1999-04-08
 8
     <160> NUMBER OF SEQ ID NOS: 11
 9
     <170> SOFTWARE: FastSEQ for Windows Version 3.0
     <210> SEQ ID NO 1
10
11
     <211> LENGTH: 115
     <212> TYPE: PRT
12
13
     <213> ORGANISM: Homo sapiens
     <400> SEQUENCE: 1
          Met Asn Ser Gly Val Cys Leu Cys Val Leu Met Ala Val Leu Ala Ala
15
16
                                               10
           Gly Ala Leu Thr Gln Pro Val Pro Pro Ala Asp Pro Ala Gly Ser Gly
17
                                           25
18
19
           Leu Gln Arg Ala Glu Glu Ala Pro Arg Arg Gln Leu Arg Val Ser Gln
20
           Arg Thr Asp Gly Glu Ser Arg Ala His Leu Gly Ala Leu Leu Ala Arg
21
22
           Tyr Ile Gln Gln Ala Arg Lys Ala Pro Ser Gly Arg Met Ser Ile Val
23
24
                               70
           Lys Asn Leu Gln Asn Leu Asp Pro Ser His Arg Ile Ser Asp Arg Asp
25
26
           Tyr Met Gly Trp Met Asp Phe Gly Arg Arg Ser Ala Glu Glu Tyr Glu
27
                       100
                                           105
28
29
           Tyr Pro Ser
30
                   115
     <210> SEQ ID NO 2
31
32
     <211> LENGTH: 58
33
     <212> TYPE: PRT
     <213> ORGANISM: Homo sapiens
34
35
     <400> SEQUENCE: 2
           Val Ser Gln Arg Thr Asp Gly Glu Ser Arg Ala His Leu Gly Ala Leu
36
37
           Leu Ala Arg Tyr Ile Gln Gln Ala Arg Lys Ala Pro Ser Gly Arg Met
38
39
                       20
                                           25
           Ser Ile Val Lys Asn Leu Gln Asn Leu Asp Pro Ser His Arg Ile Ser
                                       40
41
42
           Asp Arg Asp Tyr Met Gly Trp Met Asp Phe
43
     <210> SEQ ID NO 3
```

PAGE: 2

## RAW SEQUENCE LISTING

PATENT APPLICATION US/09/288,326

DATE: 04/20/1999 TIME: 11:07:44

Input Set: I288326.RAW

```
45
     <211> LENGTH: 39
     <212> TYPE: PRT
46
     <213> ORGANISM: Homo sapiens
47
48
     <400> SEQUENCE: 3
49
           Tyr Ile Gln Gln Ala Arg Lys Ala Pro Ser Gly Arg Met Ser Ile Val
50
           Lys Asn Leu Gln Asn Leu Asp Pro Ser His Arg Ile Ser Asp Arg Asp
51
52
                                            25
53
           Tyr Met Gly Trp Met Asp Phe
54
55
     <210> SEQ ID NO 4
56
     <211> LENGTH: 33
57
     <212> TYPE: PRT
58
     <213> ORGANISM: Homo sapiens
59
     <400> SEQUENCE: 4
           Lys Ala Pro Ser Gly Arg Met Ser Ile Val Lys Asn Leu Gln Asn Leu
60
61
            1
           Asp Pro Ser His Arg Ile Ser Asp Arg Asp Tyr Met Gly Trp Met Asp
62
63
                                            25
64
           Phe
65
     <210> SEQ ID NO 5
     <211> LENGTH: 12
66
67
     <212> TYPE: PRT
68
     <213> ORGANISM: Homo sapiens
69
     <400> SEQUENCE: 5
70
           Ile Ser Asp Arg Asp Tyr Met Gly Trp Met Asp Phe
71
72
     <210> SEO ID NO 6
73
     <211> LENGTH: 9
74
     <212> TYPE: PRT
75
     <213> ORGANISM: Homo sapiens
76
     <400> SEQUENCE: 6
77
           Arg Asp Tyr Met Gly Trp Met Asp Phe
78
79
     <210> SEQ ID NO 7
80
     <211> LENGTH: 448
81
     <212> TYPE: PRT
     <213> ORGANISM: Clostridium botulinum
83
     <400> SEQUENCE: 7
           Met Pro Phe Val Asn Lys Gln Phe Asn Tyr Lys Asp Pro Val Asn Gly
84
85
                                                10
86
           Val Asp Ile Ala Tyr Ile Lys Ile Pro Asn Ala Gly Gln Met Gln Pro
87
                                            25
88
           Val Lys Ala Phe Lys Ile His Asn Lys Ile Trp Val Ile Pro Glu Arg
89
90
           Asp Thr Phe Thr Asn Pro Glu Glu Gly Asp Leu Asn Pro Pro Glu
91
                                    55
92
           Ala Lys Gln Val Pro Val Ser Tyr Tyr Asp Ser Thr Tyr Leu Ser Thr
93
                               70
94
           Asp Asn Glu Lys Asp Asn Tyr Leu Lys Gly Val Thr Lys Leu Phe Glu
```

DATE: 04/20/1999 TIME: 11:07:44 RAW SEQUENCE LISTING
PATENT APPLICATION US/09/288,326 PAGE: 3

Input Set: 1288326.RAW

																0.5	
95						85					90	_	<b>-</b>	m1	0	95 -10	*** 1
96	Į	Arg	Ile	Tyr	Ser	Thr	Asp	Leu	Gly		Met	Leu	ьeu	Thr	ser	TIE	vaı
97					100				_	105				m1	110	T	T
98	Z	Arg	Gly	Ile	Pro	Phe	$\mathtt{Trp}$	Gly	Gly	Ser	Thr	Ile	Asp	Thr	GIU	Leu	гув
99				115					120					125		_	
100	7	Val	Ile	Asp	Thr	Asn	Cys	Ile	Asn	Val	Ile	Gln	Pro	Asp	GLY	ser	Tyr
101			130					135					140		_	_	
102	1	Arg	Ser	Glu	Glu	Leu	Asn	Leu	Val	Ile	Ile	Gly	Pro	Ser	Ala	Asp	IIe
103		145					150					155					160
104	:	Ile	Gln	Phe	Glu	Cys	Lys	Ser	Phe	Gly	His	Glu	Val	Leu	Asn	Leu	Thr
105						165					170					175	
106	i	Arg	Asn	Gly	Tyr	Gly	Ser	Thr	Gln	Tyr	Ile	Arg	Phe	Ser	Pro	Asp	Phe
107					180					185					190		
108		Thr	Phe	Gly	Phe	Glu	Glu	Ser	Leu	Glu	Val	Asp	Thr	Asn	Pro	Leu	Leu
109				195					200					205			
110	(	Gly	Ala	Gly	Lys	Phe	Ala	Thr	Asp	Pro	Ala	Val	Thr	Leu	Ala	His	Glu
111			210					215					220				
112		Leu	Ile	His	Ala	Gly	His	Arg	Leu	Tyr	Gly	Ile	Ala	Ile	Asn	Pro	Asn
113		225					230					235					240
114		Arq	Val	Phe	Lys	Val	Asn	Thr	Asn	Ala	Tyr	Tyr	Glu	Met	Ser	Gly	Leu
115		_				245					250					255	
116		Glu	Val	Ser	Phe	Glu	Glu	Leu	Arg	Thr	Phe	Gly	Gly	His	Asp	Ala	Lys
117					260					265					270		
118		Phe	Ile	Asp	Ser	Leu	Gln	Glu	Asn	Glu	Phe	Arg	Leu	Tyr	Tyr	Tyr	Asn
119				275					280					285			
120		Lvs	Phe	Lys	Asp	Ile	Ala	Ser	Thr	Leu	Asn	Lys	Ala	Lys	Ser	Ile	Val
121			290					295					300				
122		Glv	Thr	Thr	Ala	Ser	Leu	Gln	Tyr	Met	Lys	Asn	Val	Phe	Lys	Glu	Lys
123		305					310					315					320
124		Tvr	Leu	Leu	Ser	Glu	Asp	Thr	Ser	Gly	. rys	Phe	Ser	Val	Asp	Lys	Leu
125						325					330					335	
126		Lvs	Phe	Asp	Lys	Leu	Tyr	Lys	Met	Leu	Thr	Glu	Ile	Tyr	Thr	Glu	Asp
127					340					345	,				350		
128		Asn	Phe	Val	Lys	Phe	Phe	Lys	Val	Leu	Asn	Arg	Lys	Thr	Tyr	Leu	Asn
129				355					360					365			
130		Phe	Asp	Lys	Ala	Val	Phe	Lys	Ile	Asn	ıle	Val	Pro	Lys	Val	Asn	Tyr
131			370					375					380				
132		Thr	Ile	Tyr	Asp	Gly	Phe	Asn	Leu	Arg	, Asn	Thr	Asn	Leu	Ala	Ala	Asn
133		385					390	1				395	;				400
134		Phe	Asn	Gly	Gln	Asn	Thr	Glu	Ile	Asn	ı Asn	Met	Asn	Phe	Thr	Lys	Leu
135						405	;				410					415	i
136		Lvs	Asn	Phe	Thr	Gly	Leu	. Phe	Glu	Phe	Tyr	Lys	Leu	Lev	Cys	Val	Arg
137		_			420	)				425	5				430	)	
138		Glv	Ile	: Ile	Thr	Ser	Lys	Thr	Lys	Ser	: Leu	Asp	Lys	: Gly	y Tyr	Asn	Lys
139				435			-		440					445	5		
140	<210>	SEO	ID														
141	<211>	_															
142	<212>																
143	<213>				lost	ridi	.um k	otu]	linum	n							
144	<400>																
		×															

PAGE: 4 RAW SEQUENCE LISTING DATE: 04/20/1999
PATENT APPLICATION US/09/288,326 TIME: 11:07:44

Input Set: 1288326.RAW

	Ala				_	<b>~</b>	<b>-</b> 1_	T	tra I	λen	Δen	Tro	Ası	o I	∟eu	Phe	Phe
145					_					TO							
146	1	_	Ser	<b>a</b> 1	5 7 an	λan	Dhe	Thr	Asn	Asp	Leu	Asn	Ly	s G	3ly	Glu	Glu
147				~ ~					25					-	, ,		
148		1	Ser	20	Thr	λen	Tle	Glu	Ala	Ala	Glu	Glu	As	n I	[le	Ser	Leu
149								40					40				
150	_	<b>-</b>	35 Ile	Cln	Gln.	ጥኒ/ነገ	Tvr	Leu	Thr	Phe	Asn	Phe	As	р 2	Asn	Glu	Pro
151		_					E E					90					
152	~7 .	50	Ile	Cor	т1Б	Glu	Asn	Leu	Ser	Ser	Asp	Ile	: Il	e (	Gly	Gln	Leu
153						70					10						
154	65	T 011	Met	Pro	Asn	Ile	Glu	Arq	Phe	Pro	Asn	Gly	ь Г	s :	Lys	Tyr	Glu
155					0.5					90							
156	T 011	7 cm	Lys	Tyr	Thr	Met	Phe	His	Tyr	Leu	Arg	Ala	Gl	n	Glu	Phe	Glu
157									705								
158	uic	G1v	Lys	Ser	Arq	Ile	Ala	Leu	Thr	Asn	Ser	Va]	L As	n	Glu	Ala	Leu
159								- 120									
160	T.011	Δen	Pro	Ser	Arq	Val	Tyr	Thr	Phe	Phe	Sei	: Se	c As	q	Tyr	Val	Lys
161							125					7.2	,				
162	Lvs	Val	Asn	Lvs	Ala	Thr	Glu	Ala	Ala	. Met	: Phe	e Le	ı Gl	У	Trp	Va⊥	Glu 160
163						1 5 0	1				TD:	•					
164	Gln	Leu	Val	Tyr	Asp	Phe	Thr	Asp	Glı	ı Thi	: Se	r Gl	u Va	al	Ser	Thr	Thr
165 166					165					1/1	,						
167	Asp	LVS	Ile	Ala	Asp	Ile	Thi	: Ile	e Ile	e Ile	e Pr	о Ту	r I.	le	GLY	Pro	Ala
168									יאו	<b>.</b>					100		
169	Leu	Asn	ılle	Gly	Ası	ı Met	: Let	туз	c Ly	s As	) As	p Ph	e V	al	GIY	Ala	Leu
170								200	)					~			
171	Ιle	Phe	e Ser	Gly	, Ala	a Va	l Ile	e Lev	ı Le	u Gl	u Ph	e Il	e P	ro	GIU	TTE	Ala
172			_				211	5				44	U				
173	Ιle	e Pro	val	Leu	ı Gl	y Th	r Pho	e Ala	a Le	u Va	l Se	r Ty	rι	те	ATS	LASI	1 Lys 240
174						231	Λ				23	<b>)</b>					_
175	Va.	L Le	ı Thi	val	L Gl	n Th	r Il	e As	p As	n Al	а Le	u se	er L	ys	ALC	25!	ı Glu 5
176					~ 4	E				25	U						-
177	Lу	s Trj	o Ası	, Gl	u Va	l Ty	r Ly	ѕ Ту	r Il	e Va -	1 Tr	r As	311 I	гÞ	270	, 57.	a Lys
178				~ ~ ~	^				h							•	
179	Va.	l As	n Th	r Gl	n Il	e As	р Le	u Il	e Ar	д гу	s г/	'S IME	יו אי	i A P	GI	A FL	a Leu
180				_				28	n					.0.			
181	Gl:	u As	n Gl	n Al	a Gl	u Al	a Th	r Ly	s Al	a 11	.е т.	.e A:	) ) )	. y <b>-</b>	GI.	y	r Asn
182			_				၁۹	Γ.				٠ د	, ,				
183	Gl	n Ty	r Th	r Gl	u Gl	u Gl	u Ly	s As	n As	n 11	e As	15 L5	ie r	7211			p Asp 320
184	30	5				31	.0	_	1	- 7-	J.	τα <b>γ</b> .	1 = 1	//△t	· T1	e As	
185	Le	u Se	r Se	r Ly	s Le	u As	n Gl	u Se	er II	.e As	и Вигі	SA	ıa ı	100		33	n Ile 5
186					32	:5	_			33	>∪ 	m T.	O11 Î	viet	- Ag		
187	As	n Ly	s Ph			n Gl	n Cy	rs se	er va	T De	:L 1	YI L	cu i	100	35	0	r Met
188									4.6	ורו						-	
189	Il	e Pr			y Va	ıl Ly	s Ai	.d ⊤e	eu G.	LU A	ים עב	A	י עב	365	- 20 5		u Lys
190			35	5		_		36 - m-	50 ~~ 7.	an 7.	en A	ra G				u Il	e Gly
191	As			u Le	u Ly	s Ty	/r 1.	re 17	YE A	aħ w	311 A	-9 3	80 80				e Gly
192		37	70			_	3	75 ~~ * * *	17	ת וב	an A			Leı	u Se	r Th	nr Asp
193	G]	n Va	al As	iA q	g Le	eu Ly	ys Al	зр гу	ys V	at W	3 110	95					nr Asp 400
194	38	35				3 :	90				J						

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/288,326

DATE: 04/20/1999
TIME: 11:07:44 PAGE: 5

Input Set: 1288326.RAW

	<u>.</u>
	Ile Pro Phe Gln Leu Ser Lys Tyr Val Asp Asn Gln Arg Leu Leu Ser
195	Ile Pro Phe Gin Leu Ser 275 410
196	Thr Phe Thr Glu Tyr Ile Lys
197	Thr pne ini Giu 172 1
198	
	210 > SEQ ID NO 9
	211> LENGTH: 425
201 <	212> TYPE: PRT 213> ORGANISM: Clostridium botulinum
	213> ORGANISM: CIOSCOLLA CONTROLLA C
	400> SEQUENCE: 9  Asn Ile Ile Asn Thr Ser Ile Leu Asn Leu Arg Tyr Glu Ser Asn His  10  15
204	Asii ile ile ile ile ile ile ile ile ile i
205	1 5 10 10 10 10 10 10 10 10 10 10 10 10 10
206	25 20 Phe Asn Leu
207	20 25 Val Asn Phe Asp Pro Ile Asp Lys Asn Gln Ile Gln Leu Phe Asn Leu 40 45
208	35 40 The Val Tyr Asn
209	35 35 Glu Ser Ser Lys Ile Glu Val Ile Leu Lys Asn Ala Ile Val Tyr Asn 60
210	55 55 The Arg Ile Pro Lys
211	50 55  Ser Met Tyr Glu Asn Phe Ser Thr Ser Phe Trp Ile Arg Ile Pro Lys  75 80
212	65 70 Tyr Thr Ile Ile Asn Cys
213	65 70 75 Tyr Phe Asn Ser Ile Ser Leu Asn Asn Glu Tyr Thr Ile Ile Asn Cys
214 215	85 Sor Leu Asn Tyr Gly Glu Ile
216	85  Met Glu Asn Asn Ser Gly Trp Lys Val Ser Leu Asn Tyr Gly Glu Ile  105  100
217	100 The Live Gln Arg Val Val Phe
218	100 105  Ile Trp Thr Leu Gln Asp Thr Gln Glu Ile Lys Gln Arg Val Val Phe 120 125
219	115 120 120 Arg Trp Ile Ser Asp Tyr Ile Asn Arg Trp Ile
220	115 120 Lys Tyr Ser Gln Met Ile Asn Ile Ser Asp Tyr Ile Asn Arg Trp Ile  135 140
221	130 135  Phe Val Thr Ile Thr Asn Asn Arg Leu Asn Asn Ser Lys Ile Tyr Ile  150 150 160
222	Phe Val Thr Ile Thr Ash Ash Ash 155
223	145 150 153 Asn Gly Arg Leu Ile Asp Gln Lys Pro Ile Ser Asn Leu Gly Asn Ile 175 176
224	Asn Gly Arg Leu 11e Asp Clar 272 170 175
225	165 170  His Ala Ser Asn Asn Ile Met Phe Lys Leu Asp Gly Cys Arg Asp Thr  185 190
226	His Ala Ser Ash Ash 110 185
227	180 185  His Arg Tyr Ile Trp Ile Lys Tyr Phe Asn Leu Phe Asp Lys Glu Leu  200 205
228	His Arg Tyl He HP 200 205
229	195 200 Asn Glu Lys Glu Ile Lys Asp Leu Tyr Asp Asn Gln Ser Asn Ser Gly 215 220
230	Ash Giu bys Giu 215 220
231	210 215  Ile Leu Lys Asp Phe Trp Gly Asp Tyr Leu Gln Tyr Asp Lys Pro Tyr  240  235  240
232	235 230 235 Agn Val Agn Agn
233	225 230 255 Val Asp Val Asp Asn Asn Tyr Met Leu Asn Leu Tyr Asp Pro Asn Lys Tyr Val Asp Val Asn 255 250
234	245 250 250 250 250 250 250 250 250 250 25
235	Val Gly Ile Arg Gly Tyr Met Tyr Leu Lys Gly Pro Arg Gly Ser Val
236	265 260 265 Tan Fur Arg Gly Thr Lys
237	260 265  Met Thr Thr Asn Ile Tyr Leu Asn Ser Ser Leu Tyr Arg Gly Thr Lys 280 285
238	280 275 280 Asp Ivs Asp Asp Ile Val Arg
239	275 280  Phe Ile Lys Lys Tyr Ala Ser Gly Asn Lys Asp Asn Ile Val Arg
240	295 290 295 Yel Val Lys Asn Lys Glu Tyr
241 242	290 295 Asn Asn Asp Arg Val Tyr Ile Asn Val Val Lys Asn Lys Glu Tyr 310 320
242	305 310 313 Glu Lys Ile Leu Ser Arg Leu Ala Thr Asn Ala Ser Gln Ala Gly Val Glu Lys Ile Leu Ser
243	Arg Leu Ala Thr Asn Ala Ser Gin Ala Giy van
277	

PAGE: 6

VERIFICATION SUMMARY

PATENT APPLICATION US/09/288,326

DATE: 04/20/199
TIME: 11:07:44

DATE: 04/20/1999

Input Set: 1288326.RAW

Line ? Error/Warning

Original Text